# CS 255 Business Requirements Document

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* DriverPass is the client. DriverPass wants to provide students with online practice exams and on-the-road training so they can be better prepared for driving tests.
* DriverPass wants our help designing a website to provide online practice exams for students and the ability to book on-the-road training.

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* The system needs to help solve the problem of students failing the driving tests.
* The system needs to provide the ability to schedule in-person on-the-road training.
* The system needs to offer online practice exams.
* The system needs to offer online courses.
* The system needs to be accessible to all registered users via an internet connection.
* The system needs proper security features including varying levels of access for different user types.
* The system needs to support and track reservations, cancellations, alterations, and it needs to offer three packages.

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* Customers can book, change, or cancel appointments for on-the-road training.
* Customers can select 3 different packages, giving them different levels of access to the system.
* Employees can be given varying levels of access based on only what they need to fulfill the responsibilities of their role.
* Employees with access can make further changes to change or upgrade the system.

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* The system needs to run in a web-based environment.
* The system should be updated as new features are implemented.
* The system needs to be well-optimized and fast.

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* The platform should be Linux.
* The back end will be managed by a cloud to manage security.

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Each user will require a username and password, as well as multi-factor authentication. Input will be case-sensitive.
* Admin must immediately report bugs etc.

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* The system should be modularly developed to allow the addition, removal, or modification of users without alteration of code.
* The system will transition into updates as new features are developed.
* The admin will be able to make any changes necessary, based on full system access.

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* Username, password, and multifactor authentication will be required for logging into the system.
* Data between server and client will be managed via cloud.
* System will auto-block accounts after four consecutive login failures.
* If password is forgotten, users can change it via a secure link sent to e-mail.

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall validate user credentials when logging in.
* The system shall book, modify, and cancel reservations for on-the-road training.
* The system shall offer practice tests and courses.
* The system shall offer three packages to users.
* The system shall run in a fast optimized manner.
* The system shall show completion of tests and courses.
* The system shall manage access levels based on user credentials.

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* The needs are providing customer reservations, online courses, and practice exams; allow employees to make changes, updating the system.
* Users must be able to use the interface from a phone, laptop, desktop, tablet, or any other device with an internet connection.

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* There is no limited budget and a timeframe of about 5 months. Everything needed is assumed to be within budget.
* Access to all needed technology is available.

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* We have about 5 months of a timeframe to work with.
* We have a very limited number of employees.

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

*Chart, timeline

Description automatically generated*